Greenpoint-Williamsburg Rezoning EIS
CHAPTER 14: SOLID WASTE & SANITATION SERVICES

A. INTRODUCTION

As discussed in Chapter 1, "Project Description," a reasonable worst case development scenario (RWCDS) for development associated with the proposed action has been identified, consisting of both residential and local retail development. As indicated previously, the residential development is expected to result in the addition of approximately 16,778 net new residents to the area by 2013. It is anticipated that the retail development would result in a net increase of approximately 253,698 sf of ground-floor retail, adding an estimated 805 new employees to the study area by Analysis year 2013. The RWCDS is also anticipated to result in a net reduction of industrial/manufacturing space, vehicle and open storage uses as well as automotive uses.

According to the *CEQR Technical Manual*, actions involving construction of housing or other development generally do not require evaluation for solid waste impacts unless they are unusually large (a generation rate of less than 10,000 pounds per week, for example, is not considered large). Compliance with applicable requirements generally eliminate possible significant adverse impacts. In accordance with these guidelines, this chapter analyzes the effects of the proposed action on solid waste and sanitation services.

In order to determine whether the increase in residential and retail population due to the proposed action conforms with the City's Comprehensive Solid Waste Management Plan, a quantitative assessment was conducted. This entails the calculation of existing solid waste generation on the projected development sites, as well as a comparison of equivalent calculations in the future with and without the proposed action in place.

It should be noted that the New York City Department of Sanitation (DSNY) is currently developing amendments to the recycling program and the Solid Waste Management Plan (SWMP) to address anticipated future demands for solid waste management for the City. The existing interim SWMP expires on October 28, 2004. The amended SWMP would be effective for the next 20 years. It is anticipated that the amended SWMP would be submitted for public review in Spring 2005. The amendments would require approval by the New York City Council and the New York State Department of Environmental Conservation. It is expected that these amendments would become effective in Spring 2005. Because the amended SWMP would be in effect by the analysis year of 2013, this assessment considers the conformity of the proposed action with the amended SWMP, as currently drafted.

B. EXISTING CONDITIONS

Description of Current Sanitation Services

In New York City, the Department of Sanitation (DSNY) is the City agency responsible for the collection and disposal of municipal solid waste and recyclable materials generated by residences, some nonprofit institutions, tax exempt properties, and City agencies. DSNY also collects waste from street litter baskets, street-sweeping operations, and lot cleaning activities. Fresh Kills, which was New York City's only remaining landfill, was officially closed in March 2001. DSNY continues to pick up residential and institutional solid waste and recyclables. Under the current interim SWMP, most of the City's municipal solid waste is collected and delivered to transfer stations for sorting and transfer to larger "hopper" trucks and transported out of the City. Municipal solid waste from the Greenpoint-Williamsburg area is collected and trucked directly to out-of-State landfills and waste-to-energy facilities. Private carters consolidate solid waste at waste transfer facilities both inside and outside the City, from where it is then transported to out-of-City disposal facilities. It is estimated that DSNY collects over 12,000 tons of residential and institutional refuse and recyclables per day.[1]

The City's solid waste management services are undertaken in accordance with the SWMP, which is the responsibility of the DSNY. The SWMP establishes a hierarchy of preferred solid waste management methods to reduce and process solid waste generated within the City. The objectives of the SWMP are, in order of importance: waste minimization; reuse, recycling, or composting; and export out of the City for disposal. The SWMP mandates that solid waste be transferred to solid waste management facilities located in each borough, including special (hazardous materials) waste collection sites, composting facilities, and bulk residential waste sites. Local Law 19 of 1989 requires that DSNY and private carters collect recyclable materials and deliver them to material recovery facilities. New York City residents are required to separate aluminum foil, glass, plastic and metal containers, and newspapers and other paper wastes from household waste for separate collection. The SWMP also mandates that commercial establishments are also subject to recycling requirements. Businesses must source-separate certain types of paper wastes, cardboard, metal items, and construction wastes. Food and beverage establishments must recycle metal, glass, and plastic containers, and aluminum foil, in addition to meeting the commercial recycling requirements.

The proposed action area is located within the DSNY service area covering Brooklyn Community District 1, and the proposed action would only affect municipal solid waste services in this service area. Commercial establishments (restaurants, retail facilities, offices, industries, etc.) in the City contract with private waste carters for waste and recyclables collection and disposal. Private carters charge a fee on a per-cubic-yard basis. Depending on the source, volume, and the collection route, private carters use either manual or containerized collection. Private carters typically deliver waste to solid waste management facilities located both inside and outside of the City. The collected waste is unloaded from trucks, processed, and then loaded onto larger trucks or rail cars for transport to out-of-City disposal facilities. Overall, the City's businesses, whose waste is collected by private carting companies, generate another 13,000 tons of refuse each day.[2]

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[1] DSNY website: http://www.nyc.gov/html/dos/html/dosfact.html

[2] Ibid.

Quantitative Analysis of Solid Waste Generation

As solid waste/sanitation services is a density-based technical analysis, only those developments on identified projected development sites form the basis for the assessment of solid waste and sanitation services. As detailed in Chapter 1, "Project Description," the 76 projected development sites located in the proposed action area currently contain the following active uses: 122 DUs, 14,962 sf of commercial uses, 1,455,168 sf of industrial/manufacturing space, 694,866 sf of open parking and vehicle storage, and 43,609 sf of automotive uses. (The 76 projected development sites also currently contain vacant land and vacant structures, which are not included in estimating existing solid waste generation.)

On average, the number of persons per household in Brooklyn Community District 1 is 2.88. Assuming this figure for existing residential uses, it can be estimated that the 122 DUs currently located on the projected development sites house approximately 351 individuals. Based on City-wide average waste generation rates presented in Table 3M-1 of the *CEQR Technical Manual*, each individual is estimated to generate an average of 17 pounds per week of garbage, for a total of approximately 5,973 pounds per week. These residential units are served by DSNY collection routes.

Assuming 3 employees per 1,000 sf of retail space, it can be estimated that there are approximately 45 employees in the 14,962 sf of commercial uses estimated to exist on the 76 projected development sites. According to Table 3M-1, retail employees generate approximately 79 pounds per week of solid waste, therefore current retail/commercial development is estimated to generate approximately 3,546 pounds per week. Finally, it is assumed that there is approximately 1 employee per 800 sf of industrial space, vehicle/open storage uses, and automotive uses. For these uses, as Table 3M-1 only provides rates for two categories of industrial uses, an average of the two rates, estimated at 183 pounds per week per employee, is utilized for the above uses as representative of general industrial/open storage/automotive uses. The 76 projected development sites contain approximately 1,455,168 sf of industrial/manufacturing space, 694,866 sf of open parking and vehicle storage, and 43,609 sf of automotive uses, which are estimated to generate approximately 332,870 pounds, 158,951 pounds, and 9,976 pounds of solid waste per week, respectively.

These non-residential uses are served by private carters. Table 14-1 below summarizes the current conditions on each of the projected development sites, and provides an estimate of the amount of solid waste currently generated by each projected development site, as well as the total amount of solid waste generated by all of the 76 projected development sites combined. As shown in the table, the existing uses on the 76 projected development sites are currently estimated to generate a total of approximately 511,316 pounds of solid waste per week, most of which is collected by private carters.

C. THE FUTURE WITHOUT THE PROPOSED ACTION (NO-ACTION)

If the proposed action is not implemented, the identified projected development sites are assumed to either remain unchanged from existing conditions, or become occupied by uses that are as-of-right under existing zoning or through a BSA variance and reflect current trends if they are vacant, occupied by vacant buildings, or occupied by low intensity uses and are deemed likely to support more active uses. As discussed in Chapter 2, "Land Use, Zoning and Public Policy," DCP has identified 30 of the projected development sites on which development is projected to occur within as-of-right zoning or through BSA variances in the future without the proposed action, resulting in additional new dwelling units as well as

TABLE 14-1
Existing Solid Waste Generation on Projected Development Sites

Projected Dev. Site #	EXISTING USE					Estimated Solid Waste Generation [1] (lbs/wk)
	Industrial/ Manufacturing (SF)	Vehicle/Open Storage (SF)	Automotive (SF)	Residential (DUs)	Commercial (SF)	
3	0	559,363	0	0	0	127,954
10	0	5,000	0	0	0	1,144
15	0	10,000	0	0	0	2,288
19	45,662	0	0	1	0	10,494
22	18,202	0	0	8	0	4,555
26	0	0	0	0	0	0
29	0	0	0	0	0	0
30	0	5,000	0	0	0	1,144
32	0	0	23,000	0	0	5,261
33	17,217	0	0	0	0	3,938
39	0	0	0	0	0	0
43	4,733	0	0	0	0	1,083
45	60,951	0	0	0	0	13,943
55	114,361	0	0	0	0	26,160
56	259,549	0	0	0	0	59,372
57	5,877	0	0	0	0	1,344
60	0	0	0	0	0	0
90	0	6,405	0	0	0	1,465
98	0	0	0	0	0	0
100	0	0	0	0	0	0
102	10,000	0	2,500	0	0	2,859
105	20,625	0	0	1	0	4,767
108	0	7,500	0	0	0	1,716
110	0	5,000	0	0	0	1,144
111	0	10,000	0	0	0	2,288
119	0	0	0	17	0	832
125	10,800	0	0	0	0	2,471
130	34,100	0	0	0	0	7,800
143	7,500	0	0	0	0	1,716
144	2,500	0	0	0	0	572
145	0	0	0	0	0	0
148	43,800	0	0	0	0	10,019
149	18,045	0	4,933	0	0	5,256
160	16,660	0	0	0	2,500	4,403
160.1	27,720	0	0	0	0	6,341
161	25,875	0	0	0	0	5,919
163	17,500	2,500	0	0	0	4,575
171	55,000	0	0	0	0	12,581
172	20,526	0	0	0	0	4,695
174	2,500	12,500	0	0	0	3,431
185	0	0	0	0	0	0
186	0	0	0	0	0	0
190	9,000	0	0	0	0	2,059
191	3,519	3,775	0	0	0	1,669
193	0	0	0	0	0	0
194	0	0	0	0	0	0
199	0	0	0	0	0	0
203	2,000	0	0	0	0	458
206	2,500	0	0	0	0	572
207	0	0	0	0	0	0
208	0	0	11,300	0	0	2,585
211	299,805	40,200	0	0	0	77,776
215	45,950	0	0	0	0	10,511
218	9,680	2,000	0	0	0	2,672
220	0	0	0	0	0	0
224	65,000	0	0	0	11,000	17,476
227	0	0	0	0	0	0
230	7,550	0	0	0	0	1,727
235	72,448	0	0	0	0	16,572
236	0	0	0	37	0	1,812
240	20,688	0	0	22	0	5,810
259	13,359	0	0	0	0	3,056
266	36,106	0	0	28	0	9,630
268	0	0	0	0	0	0
270	0	0	0	0	0	0
277	0	8,575	0	0	0	1,962
295	16,044	0	0	0	0	3,670
302.1	0	0	0	0	1,462	347
308	7,489	0	0	4	0	1,909
309	0	14,748	1,876	0	0	3,803
314	0	0	0	0	0	0
321.1	4,327	0	0	4	0	1,186
320	0	0	0	0	0	0
328	0	0	0	0	0	0
331	0	2,300	0	0	0	526
335	0	0	0	0	0	0
TOTAL	**1,455,168**	**694,866**	**43,609**	**122**	**14,962**	**511,316**

[1] Based on the following assumptions
Residential Use: assume 2.88 residents per DU for existing units (based on CD average), and 17 lbs of solid waste per week per individual
Commercial Use: assume 3 employees per 1,000 sf, and 79 lbs of solid waste per week per employee
Industrial/Manufacturing: assume 1 employee per 800 sf, and 183 lbs of solid waste per week per employee
(based on average generation rates for the two industrial categories listed in Table 3M-1 of the CEQR Tecnical Manual)
Vehicle and Open Storage: assume 1 employee per 800 sf, and 183 lbs per week per employee
(based on average generation rates for the two industrial categories listed in Table 3M-1 of the CEQR Tecnical Manual)
Automotive Use: assume 1 employee per 800 sf, and 183 lbs per week per employee
(based on average generation rates for the two industrial categories listed in Table 3M-1 of the CEQR Tecnical Manual)

additional commercial space. The RWCDS also includes two development scenarios, identified throughout the EIS as Scenario A and Scenario B. Under Scenario A, Bayside Fuel is assumed to continue to occupy its current site in the future without the proposed action, whereas under Scenario B, the TransGas power plant is assumed to be an approved development in the future without the proposed action.

When combined with existing uses on the remainder of the 76 projected development sites, it is assumed that, in the future without the proposed action under Scenario A, the 76 projected development sites would contain 866 dwelling units (DUs), 83,462 sf of commercial/retail space, 1,294,281 sf of industrial/ manufacturing uses, 642,686 sf of open parking and vehicle storage, and 32,309 sf of automotive uses. For Scenario B, the power plant development would result in more industrial/manufacturing square footage (refer to Table 14-2 below).

TABLE 14-2
Solid Waste Generation on Projected Development Sites Under No-Action Conditions (for Scenarios A and B), Compared to Existing Conditions

USE	EXISTING		NO-ACTION	
	SF/DUs	Solid Waste Generated (lb/wk)	SF/DUs	Solid Waste Generated (lb/wk)
SCENARIO A				
Industrial/Manufacturing	1,455,168	332,870	1,294,281	296,067
Vehicle/Open Storage	694,866	158,951	642,686	147,014
Automotive	43,609	9,976	32,309	7,391
Residential	122	5,973	866	33,419
Commercial	14,962	3,546	83,462	19,780
TOTAL		**511,316**		**503,671**
Scenario B				
Industrial/Manufacturing	1,455,168	332,870	1,422,001	325,283
Vehicle/Open Storage	694,866	158,951	642,686	147,014
Automotive	43,609	9,976	32,309	7,391
Residential	122	5,973	866	33,419
Commercial	14,962	3,546	83,462	19,780
TOTAL		**511,316**		**532,887**

Based on the following assumptions:
Residential Use: assume 2.88 residents per DU for existing units and 2.27 residents per DU for No-Action, and 17 lbs of solid waste per week per individual
Commercial Use: assume 3 employees per 1,000 sf, and 79 lbs of solid waste per week per employee
Industrial/Manufacturing, Vehicle and Open Storage, and Automotive Uses: assume 1 employee per 800 sf, and 183 lbs of solid waste per week per employee

Table 14-2 summarizes the solid waste generation for each use under No- Action conditions, for both Scenario A and Scenario B, and compares it to existing conditions. The same assumptions utilized for existing conditions were applied in calculating solid waste generation on the 76 projected development

sites in the future without the proposed action, with one exception. For the 866 dwelling units that would be located on the projected development sites, a different assumption of household size was made. As discussed in Chapter 1, "Project Description," because of the scarcity of sites on which residential development would be possible as-of-right in the future without the proposed action, and because many of the units developed under No-Action conditions would be pursuant to variances, it is assumed that none of the units developed in the proposed action area in the future without the proposed action would be low-to moderate-income. Given that Census data indicate that the average household size for unsubsidized units in this area is 2.27, this rate is used in calculating the number of residents per dwelling unit for those units developed under No-Action conditions.

Based on the above assumptions, it is estimated that the 76 projected development sites would generate approximately 503,671 pounds of solid waste per week in the future without the proposed action under Scenario A, and approximately 532,887 pounds of solid waste per week under Scenario B. As shown in Table 14-2, Scenario A would result in less solid waste generation on the 76 projected development sites in the future without the proposed action, compared to existing conditions. Under Scenario B, solid waste generation on the 76 projected development sites would increase by approximately 4.2 percent (21,571 pounds of solid waste per week) in the future without the proposed action as compared to existing conditions.

As noted above, the Fresh Kills landfill was closed in 2001. In order to close Fresh Kills, New York City developed interim plans to export all of the municipal waste that it collects. A long-term plan was developed, but led to large-scale trucking of municipal solid waste. A new Comprehensive Solid Waste Management Plan (SWMP) is being developed with a focus on municipal solid waste. DSNY continues to pick up residential and institutional solid waste and take it to transfer stations for out-of-city disposal until a long-term plan is developed and implemented.

In October 2004, the New York City Department of Sanitation (DSNY) issued a draft New Comprehensive Solid Waste Management Plan (SWMP) that establishes the anticipated structure of New York City's solid waste management for the next 20 years, including a Long Term Export program. The City's Long Term Export Program is anticipated to be implemented through: (1) the development of four converted marine transfer stations (MTS); (2) the award of up to five contracts with private transfer stations for barge or rail export of DSNY-managed waste for disposal; and (3) an intergovernmental agreement to dispose of a portion of Manhattan's DSNY-managed waste at a Port Authority waste-to-energy facility in New Jersey. As currently proposed, the new SWMP would mandate the use of up to nine converted MTS and private transfer stations within the five boroughs at which solid waste would be consolidated, containerized, and barged or railed out of the City. The barges currently used at MTS facilities would be replaced or retrofitted with new sealed containers or "intermodal containers" capable of being transported on barge or rail. In the interim, all municipal solid waste would be trucked out of the City.[3]

For the study area, which is currently served by the Greenpoint MTS at North Henry Street and Kingsland Avenue on the Newtown Creek, the DSNY is anticipated enter into a long-term contract with one or two private transfer station waste companies for truck-to-rail or truck-to-barge disposal of DSNY-managed waste. The decision as to whether DSNY contracts for export of all or a portion of DSNY-managed waste

[3] Source: NYC Department of Sanitation, *Draft Comprehensive Solid Waste Management Plan*, Oct 2004, pp. 3-1 to 3-2.

at one or two potential transfer stations in the area will be determined by upcoming negotiations with the proposed companies which will be finalized by 2005. [4]

The Draft New SWMP identified two potential long-term export facilities for the study area including, Waste Management at 485 Scott Avenue, which would be a truck-to-barge transfer station that could process approximately 2,999 tons per day, and Allied at 72 Scott Avenue-598 Scholes Street, which would serve as a truck-to-rail transfer station that could process approximately 1,500 tons per day. Both of these private transfer stations are existing facilities that process commercial waste, and would require permit modifications to facilitate barge or rail export. Neither facility will require an expansion. The DSNY is anticipated to finalize the design, permitting, and construction, if required, as well as begin facility operations by 2006.[5]

D. THE FUTURE WITH THE PROPOSED ACTION (WITH-ACTION)

As discussed in Chapter 1, "Project Description," the proposed action is expected to result in new residential and some commercial development on the projected development sites, which would replace most of the industrial/manufacturing and automotive uses, and all of the vehicle/open storage uses. In the future with the proposed action, it is anticipated that a total of approximately 8,257 dwelling units and approximately 337,160 square feet of local retail space would be developed on the 76 upland and waterfront projected development sites.

Compared with future conditions without the proposed action, the projected incremental (net) change that would result from the proposed action at the 76 projected development sites under Scenario A is 7,391 DUs. There would also be 253,698 sf of local retail, a new park with approximately 27.8 acres of land area, -642,686 sf of open parking and vehicle storage uses, -1,136,269 sf of industrial/manufacturing space, and -24,876 sf of automotive uses. Under Scenario B, the projected incremental (net) change that would result from the proposed action at the 76 projected development sites is 7,391 DUs, 253,698 sf of local retail, a new park with approximately 15.9 acres of land area, -555,764 sf of vacant land, -642,686 sf of open parking and vehicle storage uses, -557,906 sf in vacant buildings, -1,076,864 sf of industrial/manufacturing space, and -24,876 sf of automotive uses.

The same assumptions utilized for non-residential uses under future No-Action conditions were applied in calculating solid waste generation on the 76 projected development sites in the future with the proposed action. For new residential units expected to be developed under No-Action conditions, a rate of 2.27 persons per units was utilized, which is the average rate for unsubsidized units in the area (based on 2000 Census data). Table 14-3 shows the solid waste expected to be generated by each of the projected development sites in the future with the proposed action. Based on the above assumptions, it is estimated that the 76 projected development sites would generate approximately 436,390 pounds (or 218 tons) of solid waste per week in the future with the proposed action under Scenario A, and approximately 479,195 pounds (or 240 tons) of solid waste per week under Scenario B. As shown in summary Table 14-4 below, both scenarios would result in less solid waste generation on the 76 projected development sites in the future with the proposed action, compared to future No-Action conditions.

[4] Ibid, p. 3-3.

[5] Ibid, pp. 3-5, 3-8 (Table 3.3-2) and 3-13 (Table 3.4-2).

TABLE 14-3
Expected Solid Waste Generation on Projected Development Sites with the Proposed Action

Projected Dev. Site #	PROJECTED USE					Estimated Solid Waste Generation [1] (lbs/wk)
	Industrial/ Manufacturing (SF)	Vehicle/Open Storage (SF)	Automotive (SF)	Residential (DUs)	Commercial (SF)	
3	0	0	0	2,351	55,000	103,760
10	0	0	0	16	0	617
15	0	0	0	30	0	1,158
19	0	0	0	31	5,000	2,381
22	0	0	0	21	0	810
26	0	0	0	18	0	695
29	0	0	0	3	0	116
30	0	0	0	11	4,500	1,491
32	0	0	0	0	20,000	4,740
33	0	0	0	52	0	2,007
39	0	0	0	13	0	502
43	0	0	0	15	0	579
45	0	0	0	44	0	1,698
55	102,361	0	0	0	12,000	26,259
56	0	0	0	1,999	60,000	91,361
57	0	0	0	59	0	2,277
60	0	0	0	120	0	4,631
90	0	0	0	13	0	502
98	0	0	0	39	0	1,505
100	0	0	0	220	20,000	13,230
102	0	0	2,500	0	10,000	2,942
105	0	0	0	159	0	6,136
108	0	0	0	23	0	888
110	0	0	0	15	0	579
111	0	0	0	30	0	1,158
119	0	0	0	36	0	1,389
125	0	0	0	60	0	2,315
130	0	0	0	65	10,000	4,878
143	0	0	0	23	0	888
144	0	0	0	24	0	926
145	0	0	0	88	0	3,396
148	0	0	0	32	0	1,235
149	10,545	0	4,933	0	7,500	5,318
160	0	0	0	59	0	2,277
160.1	0	0	0	36	18,000	5,655
161	0	0	0	38	0	1,466
163	0	0	0	56	4,500	3,228
171	0	0	0	40	0	1,544
172	0	0	0	47	0	1,814
174	0	0	0	46	0	1,775
185	0	0	0	56	0	2,161
186	0	0	0	10	0	386
190	9,000	0	0	0	0	2,059
191	0	0	0	10	0	386
193	0	0	0	35	4,500	2,417
194	0	0	0	3	0	116
199	0	0	0	1,194	70,000	62,666
203	0	0	0	19	4,500	1,800
206	0	0	0	32	0	1,235
207	0	0	0	0	4,000	948
208	0	0	0	23	0	888
211	0	0	0	0	0	0
215	0	0	0	135	0	5,210
218	0	0	0	52	0	2,007
220	0	0	0	4	0	154
224	0	0	0	84	0	3,242
227	0	0	0	10	0	386
230	0	0	0	15	0	579
235	0	0	0	209	10,000	10,435
236	0	0	0	59	0	2,277
240	0	0	0	37	0	1,428
259	0	0	0	34	0	1,312
266	36,106	0	0	53	0	10,305
268	0	0	0	12	0	463
270	0	0	0	21	0	810
277	0	0	0	22	0	849
295	0	0	0	0	15,810	3,747
302.1	0	0	0	5	1,850	631
308	0	0	0	16	0	617
309	0	0	0	37	0	1,428
314	0	0	0	12	0	463
321.1	0	0	0	10	0	386
320	0	0	0	33	0	1,273
328	0	0	0	59	0	2,277
331	0	0	0	15	0	579
335	0	0	0	9	0	347
TOTAL SCENARIO A	**158,012**	**0**	**7,433**	**8,257**	**337,160**	436,390
TOTAL SCENARIO B[2]	**345,137**	**0**	**7,433**	**8,257**	**337,160**	479,195

[1] Based on the following assumptions
Residential Use: assume 2.27 residents per DU for projected units (based on CD average), and 17 lbs of solid waste per week per individual
Commercial Use: assume 3 employees per 1,000 sf, and 79 lbs of solid waste per week per employee
Industrial/Manufacturing: assume 1 employee per 800 sf, and 183 lbs of solid waste per week per employee
(based on average generation rates for the two industrial categories listed in Table 3M-1 of the CEQR Technical Manual)
Vehicle and Open Storage: assume 1 employee per 800 sf, and 183 lbs per week per employee
(based on average generation rates for the two industrial categories listed in Table 3M-1 of the CEQR Technical Manual)
Automotive Use: assume 1 employee per 800 sf, and 183 lbs per week per employee
(based on average generation rates for the two industrial categories listed in Table 3M-1 of the CEQR Technical Manual)

[2] For Scenario B, the TransGas development on SIte 211 would result in a slight increase in industrial/manufacturing space. All other developments are the same as for Scenario A.

TABLE 14-4
Comparison of Solid Waste Generation on Projected Development Sites Under Action Conditions (for Scenarios A and B), Compared to No-Action Conditions

USE	NO-ACTION		WITH-ACTION		Solid Waste Increment
	SF/DUs	Solid Waste Generated (lb/wk)	SF/DUs	Solid Waste Generated (lb/wk)	
SCENARIO A					
Industrial/Manufacturing	1,294,281	296,067	158,012	36,145	(259,922)
Vehicle/Open Storage	642,686	147,014	0	0	(147,014)
Automotive	32,309	7,391	7,433	1,700	(5,691)
Residential	866	33,419	8,257	318,638	285,219
Commercial	83,462	19,780	337,160	79,907	60,127
TOTAL		**503,671**		**436,390**	**(67,281)**
Scenario B					
Industrial/Manufacturing	1,422,001	325,283	345,137	78,950	(246,333)
Vehicle/Open Storage	642,686	147,014	0	0	(147,014)
Automotive	32,309	7,391	7,433	1,700	(5,691)
Residential	866	33,419	8,257	318,638	285,219
Commercial	83,462	19,780	337,160	79,907	60,127
TOTAL		**532,887**		**479,195**	**(53,692)**

Based on the following assumptions:
Residential Use: assume 2.27 residents per DU for No-Action and With-Action, and 17 lbs of solid waste per week per individual
Commercial Use: assume 3 employees per 1,000 sf, and 79 lbs of solid waste per week per employee
Industrial/Manufacturing, Vehicle and Open Storage, and Automotive Uses: assume 1 employee per 800 sf, and 183 lbs of solid waste per week per employee

However, whereas most of the existing and no-action solid waste generated on the 76 projected development sites would be associated with non-residential uses, and hence picked-up by private carting companies, approximately 318,638 pounds per week of the total solid waste generated by the projected development sites under the proposed action would be associated with residential uses. Solid waste generated by new residential development is expected to be picked up by DOS collection trucks. New residential development would be served by existing DOS collection routes with the Department adjusting appropriate collection levels to service the community. Residents would be required to participate in the City's ongoing recycling program for paper, metals, and certain types of plastics, and glass.

As currently drafted, the amended SWMP would require all municipal solid waste generated in the Greenpoint-Williamsburg area to be transported to the greenpoint MTS for transfer to barges for ultimate disposal outside of the City. The Greenpoint MTS, which would be retrofitted/upgraded in the future without the proposed action, is expected to have sufficient capacity to accommodate the additional municipal waste generated by the proposed action.

The solid waste generated by residential uses would be equivalent to approximately 22.8 tons per day, for a net increase of 20.4 tons per day compared to No-Action conditions. According to the *CEQR Technical Manual*, the typical DOS collection truck for residential refuse carries approximately 12.5 tons of waste material. Therefore, the new residential uses induced by the proposed action on the 76 projected development sites would be expected to generate solid waste equivalent to approximately 2 truck loads per day (assuming a seven-day week). Given that the 76 projected development sites are spread out over the 184-block proposed action area, this increase is not expected to overburden the DSNY's solid waste handling services, and the proposed action would not have a significant adverse impact on the City's solid waste and sanitation services.

E. CONCLUSIONS

No significant adverse impacts are expected. Development pursuant to the proposed action would occur in an area which is currently served by DOS residential trash and recycling pick-ups. The proposed action would not affect the delivery of these services, or place a significant burden on the City's solid waste management system. The resulting net increase in solid waste to be picked up by DOS is relatively small (about 20.4 tons per day) when compared to the estimated 12,000 tons of residential and institutional refuse and recyclables collected by DOS per day. In addition, due to the proposed action, non-residential waste serviced by private carters would decrease in the area and so would not overburden the private system.